



PATENT
CUSTOMER NUMBER, 34,986
Docket No. 01064.0011-05-000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Richard LEVY) Group Art Unit: 1714
Serial No.: 09/359,809) Examiner: Cephia D. Toomer
Filed: July 23, 1999)
For: LUBRICANT COMPOSITIONS AND)
METHODS)

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.56 and 1.97(c)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(c), applicant brings to the attention of the Examiner the documents listed on the attached Form PTO 1449 (six sheets). This Information Disclosure Statement is being filed after the events recited in Section 1.97(b) but, to the undersigned's knowledge, before the mailing date of either a Final action, Quayle action, or a Notice of Allowance. Under the provisions of 37 C.F.R. § 1.97(c) this Information Disclosure Statement is accompanied by PTO Form 2038 for payment of the fee of \$180.00 as specified by Section 1.17(p).

The documents show inter alia, categories of lubricants known to the skilled artisan prior to the June 7, 1995, filing date of the parent application that forms the basis for the present application.

Class 508, Subclass 123, lubricant alloys or elemental metals:

Gardos et al. U. S. Patent No. 4,376,710, lubricants comprising alloys of,

Ga / In / WSe₂

Mo / Nb / Cu / MoS₂

MoS₂ / Ta₂.

Lemmer U.S. Patent No. 4,050,932, lubricants comprising copper alloys.

Class 508, Subclass 121, boron or silicon containing lubricants:

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Oldiges et al. U.S. Patent No. 5,536,422, lubricants comprising carbonate, boron nitride, silicate, and acetate compounds.

Otake et al. U.S. Patent No. 4,765,917, lubricants comprising carbonate, borate, and boron nitride.

Jain et al. U.S. Patent No. 4,104,178, lubricants comprising sodium bicarbonate, sodium pentaborate, and sodium molybdate.

Jain et al. U.S. Patent No. 3,983,042, lubricants comprising sodium bicarbonate, sodium pentaborate, and sodium molybdate.

Class 508, Subclass 124, silicon containing lubricants:

Oldiges U.S. Patent No. 5,093,015, lubricants comprising copper or alloys thereof, calcium carbonate or Al, Sb, Vd, W or Ni .

Rodriguez U.S. Patent No. 4,363,737, lubricants comprising boron nitrite, boron nitrate, and titanium dioxide.

Class 508, Subclass 129, lubricants with inorganic compounds:

Lum et al. U.S. Patent No. 5,468,401, lubricants comprising dibutyltin carbonate and boron nitride.

Rao et al. U.S. Patent No. 5,363,821, lubricants comprising boron nitride.

Swazaki et al. U.S. Patent No. 5,346,634, lubricants comprising sodium polycarbonate, CaCO_3 , BN_3 , SnO , PbO , ZnO , CaO , CuO , and Al_2O_3 .

Whe et al. U.S. Patent No. 5,269,953, lubricants comprising graphitic oxide.

Jacobs U.S. Patent No. 5,049,289, lubricants comprising CaO , MgO , ZnO , CaCO_3 , MgCO_3 , and ZnCO_3 .

King U.S. Patent No. 4,965,001, lubricants comprising antimony trioxide, antimony tetroxide, antimony pentoxide, and lead oxide.

Mendelson et al. U.S. Patent No. 4,909,951, lubricants comprising calcium thiocarbonate, calcium trithiocarbonate, and calcium tetrathiocarbonate.

Dumdum et al. U.S. Patent No. 4,908,142, lubricants comprising calcium thiocarbonate, calcium trithiocarbonate, and calcium tetrathiocarbonate.

Periard et al. U.S. Patent No. 4,575,430, lubricants comprising boron nitride.

Tubbs et al. U.S. Patent No. 4,557,839, lubricants comprising Sb_2O_3 .

Jain et al. U.S. Patent No. 4,287,073, lubricants comprising sodium bicarbonate, sodium pentaborate, and sodium molybdate.

Spiegleberg U.S. Patent No. 4,096,076, lubricants comprising cobalt oxide, and diboron trioxide.

Burgess et al. U.S. Patent No. 3,931,020, lubricants comprising sodium nitrite, sodium nitrate, potassium nitrate and zinc oxide.

Class 508, Subclass 150, lubricant alloys or metals:

Rao et al. U.S. Patent No. 5,663,124, low alloy steel powders with solid lubricant properties, e.g., alloys of Fe, Mn, Ni, Cu, and, C.

Strumban U.S. Patent No. 5,523,006, lubricants comprising Cu, Ni, Sn and Cu, Ni, Sn, Zn alloy.

Weischel et al. U.S. Patent No. 5,397,485, lubricants comprising alloy particles of Pb/Cu, Pb/Cu/Zn or Sn or other metals.

Sugimara et al. U.S. Patent No. 5,013,464, lubricants comprising Ga or alloys of Ga with at least one of In, Zn, Sn, or Al.

Buran et al. U.S. Patent No. 4,756,841, lubricants comprising a coating of Ni/CrC or Mo/Ni alloy and at least one of Cr, CrC or MoC.

Jamison U.S. Patent No. 4,647,386, lubricants comprising Nb, Ta or W or alloy thereof with at least one of Cr, Vd, Mo, W or Fe.

Palmer U.S. Patent No. 4,541,984, lubricants comprising a coating of alloys of Zr, Yt, Ti, Ce, Co, Ni, Cr and compounds or mixtures thereof.

Hurst U.S. Patent No. 4,076,637, lubricants comprising alloy powders based on Sn, Bi Cd, Pb, In or Ga.

Burke U.S. Patent No. 3,994,697, lubricants comprising metal alloys for combining with MoS₂ for lubricating an engine.

De Hart et al. U.S. Patent No. 3,939,081, lubricants comprising a chrome alloy of carbon steel.

Class 508, Subclass 154, lubricant inorganic compounds:

Forster U.S. Patent No. 5,507,961, lubricants comprising coatings of Cs, MoO₄, SO₄, WO₄, WOS₃, or MoO₃, and CsOH.

Class 508, Subclass 178, lubricant metal oxide compounds:

Kojima U.S. Patent No. 5,156,756, lubricants comprising SnO and/or TiO₂ powder.

Class 508, Subclass 180, lubricant carbonate compounds:

Waynick U.S. Patent No. 4,986,923, lubricants comprising Group IA or Group IIA carbonates in grease.

Nader et al. U.S. Patent No. 5,456,848, lubricants comprising cesium carbonate.

Olsen et al. U.S. Patent No. 5,308,514, lubricants comprising calcium carbonate.

Ito et al. U.S. Patent No. 5,244,587, lubricants comprising calcium carbonate.

Chiddick et al. U.S. Patent No. 5,173,204, lubricants comprising calcium carbonate, magnesium carbonate and lead carbonate.

Waynick U.S. Patent No. 5,158,694, lubricants comprising Group IA or Group IIA carbonates.

Wainright U.S. Patent No. Re 31,611, lubricants comprising Group IIA carbonates.

Sternlieb U.S. Patent No. 4,143,423, lubricants comprising sodium, or potassium carbonate, citrate, acetate, bicarbonate, trihydrate, and citrate dihydrate.

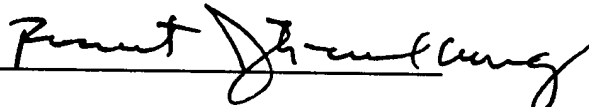
This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claims in the application and applicant determines that the cited documents do not constitute "prior art" under United States law, applicant reserves the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

Respectfully submitted,

THE LAW OFFICES OF ROBERT J. EICHELBURG

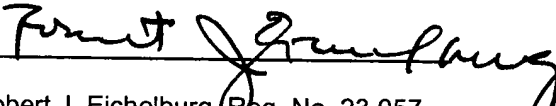
August 31, 2005

By: 
Robert J. Eichelburg, Reg. No. 23,057

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Services pursuant to 37 C.F.R. § 1.8 on the date indicated below and is addressed to the Commissioner for Patents, P.O. BOX 1450, Alexandria, Virginia 22313 -1450

August 31, 2005

By: 
Robert J. Eichelburg, Reg. No. 23,057



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| RM PTO-1449 Page 1 of 6 INFORMATION DISCLOSURE STATEMENT <i>(Use several sheets if necessary)</i> | | | | ATTY. DOCKET NO. 01064.0011-05-000 | | | |
| | | | | APPLICANT Richard LEVY Ser.No. 09/359,809 | | | |
| | | | | FILING DATE July 23, 1999 | | GROUP ART UNIT 1714 | |

| *Examiner's Initials | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB- CLASS | FILING DATE, IF APPROPRIATE |
|-------------------------|--------------------|-----------|----------|---------------|---------------|--------------------------------|
| | US | 4,376,710 | 3/15/83 | Gardos et al. | 508 | 123 |
| | US | 4,050,932 | 9/27/77 | Lemmer | 508 | 123 |
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| | US | 4,765,917 | 8/23/88 | Otaki et al. | 508 | 121 |
| | US | 4,104,178 | 8/1/78 | Jain et al. | 508 | 121 |
| | US | 3,983,042 | 9/28/76 | Jain et al. | 508 | 121 |
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| | US | 5,093,015 | 3/3/92 | Oldiges | 508 | 124 |
| | US | 4,363,737 | 12/14/82 | Rodriguez | 508 | 124 |

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| FORM PTO-1449 | | Page 2 | | ATTY. DOCKET NO. 01064.0011-08-000 | | Ser.No. 09/359,809 | |
| INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) | | | | APPLICANT Richard LEVY | | | |
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| *Examiner's Initials | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB- CLASS | FILING DATE, IF APPROPRIATE |
| | US | 5,437,802 | 8/1/95 | Kurashi et al. | 508 | 129 | |
| | US | 5,363,821 | 11/15/94 | Rao et al. | 508 | 129 | |
| | US | 5,346,634 | 9/13/94 | Sawazaki et al. | 508 | 129 | |
| | US | 5,269,953 | 12/14/93 | Whewell | 508 | 129 | |
| | US | 5,049,289 | 1/19/93 | Jacobs | 508 | 129 | |
| | US | 4,965,001 | 10/23/90 | King | 508 | 129 | |
| | US | 4,909,951 | 3/20/90 | Mendelson et al. | 508 | 129 | |
| | US | 4,908,142 | 3/13/90 | Dumdum et al. | 508 | 129 | |
| | US | 4,575,430 | 3/11/86 | Periard et al. | 508 | 129 | |
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| FORM PTO-1449 Page 3 of 6 | | | | ATTY. DOCKET NO. 01064.0011-08-000 | | Ser.No. 09/359,809 | |
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| | US | 4,557,839 | 12/10/85 | Tubbs et al. | 508 | 129 | |
| | US | 4,287,073 | 9/1/81 | Jain et al. | 508 | 129 | |
| | US | 4,096,076 | 6/20/78 | Spiegleberg | 508 | 129 | |
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| | US | 5,397,485 | 3/14/95 | Weischel et al. | 508 | 150 | |
| | US | 5,013,464 | 6/12/89 | Sugimura et al. | 508 | 150 | |
| | US | 4,756,841 | 7/12/88 | Buran et al. | 508 | 150 | |
| | US | 4,647,386 | 3/3/87 | Jamison | 508 | 150 | |
| | US | 4,541,984 | 9/17/85 | Palmer | 508 | 150 | |
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| FORM PTO-1449 Page 4 of 6 | | | | ATTY. DOCKET NO. 01064.0011-0-000 | | Ser.No. 09/359,809 | |
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| *Examiner's Initials | US | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE, IF APPROPRIATE |
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| | US | 4,076,637 | 2/28/78 | Hurst | 508 | 150 | |
| | US | 3,994,697 | 11/30/76 | Burke | 508 | 150 | |
| | US | 3,939,081 | 11/20/76 | DeHart et al. | 508 | 150 | |
| | US | 5,156,756 | 10/20/92 | Kojima | 508 | 178 | |
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| | US | 5,456,848 | 10/10/95 | Nader et al. | 508 | 180 | |
| | US | 5,308,514 | 5/3/94 | Olson et al. | 508 | 180 | |
| | US | 5,244,587 | 9/14/93 | Ito et al. | 508 | 180 | |
| | US | 5,173,204 | 12/22/92 | Chiddick et al. | 508 | 180 | |

| *Examiner's Initials | US | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | |
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| FORM PTO-1449 Page 5 of 6 | | | | ATTY. DOCKET NO. 01064.0011-08-000 | | Ser.No. 09/359,809 | |
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| | US | 5,158,694 | 2/28/78 | Hurst | 508 | 150 | |
| | US | 3,994,597 | 11/30/76 | Burke | 508 | 150 | |
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| | US | 5,156,756 | 10/20/92 | Kojima | 508 | 178 | |
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| | US | 5,456,848 | 10/10/95 | Nader et al. | 508 | 180 | |
| | US | 5,308,514 | 5/3/94 | Olson et al. | 508 | 180 | |
| | US | 5,244,587 | 9/14/93 | Ito et al. | 508 | 180 | |
| | US | 5,173,204 | 12/22/92 | Chiddick et al. | 508 | 180 | |

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| | US | 5,158,694 | 10/27/94 | Waynick | 508 | 180 | |
| | US | RE 31,611 | 6/26/84 | Wainright | 508 | 180 | |
| | US | 4,143,423 | 3/13/79 | Steinlieb | 508 | 180 | |
| | US | 4,986,923 | 1/22/91 | Waynick | 508 | 180 | |
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| | US | 5,218,011 | 6/8/93 | Freeman | 523 | 173 | |
| | | 5,049,593 | 9/17/91 | Marciano-Agostinelli et al. | 523 | 173 | |
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